

**ABSTRACT**

A transformer core comprises a plurality of segments of amorphous metal strips. Each of the segments comprises at least one packet of the strips. The packet comprises a plurality of groups of cut amorphous metal strips arranged in a step-lap joint pattern.

- 5 Packets thus formed can have C-shape, I-shape or straight segment-shape configurations. Assembly of the transformer is accomplished by placing at least two of the segments together. Core manufacturing is simplified and core and coil assembly time is decreased. Stresses otherwise encountered during manufacture of the core are minimized and core loss of the completed transformer is reduced. Construction and assembly of large core
- 10 transformers is carried out with lower stress and higher operating efficiencies than those produced from wound core constructions.